SOFTWARE RADIO ARCHITECTURE

 \neg

 Γ

SOFTWARE RADIO ARCHITECTURE

Object-Oriented Approaches to Wireless Systems Engineering

Joseph Mitola III

Consulting Scientist

Г



A Wiley-Interscience Publication

JOHN WILEY & SONS, INC.

New York · Chichester · Weinheim · Brisbane · Singapore · Toronto

This book is printed on acid-free paper. ⊚

Copyright © 2000 by John Wiley & Sons, Inc. All rights reserved.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 750-4744. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158-0012, (212) 850-6011, fax (212) 850-6008, E-Mail: PERMREQ@WILEY.COM.

For ordering and customer service, call 1-800-CALL-WILEY.

Library of Congress Cataloging-in-Publication Data:

Mitola, Joseph

Г

Software Radios: wireless architectures for the 21st century/Joseph Mitola III.

p. cm.

"A Wiley-Interscience publication."

ISBN 0-471-38492-5 (Cloth: alk. paper)

1. Cellular telephones. 2. Radio frequency modulation—Computer programs. 3. Digital to analog converters. I. Title.

TK6570.M6 M55 2000 621.3845′6—dc21

00-027758

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

For Lynné ... for Barb & Max

Γ

and Dad and Mom and my Mentors and the "Alpha's"

"In the Public Interest"